**Actuarial Guideline ILVA**

**The Application of Model 250 to Variable Products Supported**

**by Non-Unitized Separate Accounts**

**Background**

Variable annuities are exempted from the scope of NAIC Model 805, Standard Nonforfeiture Law for Individual Deferred Annuities. The Model does not define the term "variable annuity". NAIC Model 250, Variable Annuity Model Regulation, provides requirements for nonforfeiture benefits. Model 250 also defines variable annuities as "contracts that provide for annuity benefits that vary according to the investment experience of a separate account."

Section 7B of the Model 250 provides that "to the extent that a variable annuity contract provides benefits that do not vary in accordance with the investment performance of a separate account" the contract shall satisfy the requirements of Model 805.

The application of the Model 250 to a traditional variable annuity with unit-linked values is straightforward. The unit-linked feature provides an automatic linkage between annuity values and the investment experience of a separate account. Daily values (market values of the separate account assets) are the basis of all the benefits, including surrender values.

Recently, a number of insurers introduced new, hybrid annuity products with periodic credits based on the performance of a specified portfolio of assets, typically through an index. These hybrid products typically are not unit-linked and do not invest in the assets whose performance forms the basis for the periodic credits.

There is no established terminology for these hybrid products. These products go by several names, including structured annuities, registered index-linked annuities, or index-linked variable annuities, among others. This guideline refers to them as index-linked variable annuities (ILVA).

The fact that ILVA products are not unit-linked means they don't have daily values determined by the market prices of the underlying assets. Instead, they provide interim values defined by contractual provisions. These interim values may or may not reflect the market values of the actual assets held by the insurer in support of the product guarantees.

Many ILVA products are registered with the SEC and claim to be exempt from model 805 as variable annuities. However, because they are not unit-linked, the question arises whether they provide values that vary according to the investment experience of a separate account, as required in Model 250.

The purpose of this guideline is to clarify the application of the Models 805 and 250 to those hybrid products. Specifically, the guideline provides conditions under which a non-unit-linked product can be considered to provide values that vary according to the investment experience of a separate account, and therefore be considered a variable annuity under Model 250 and exempt from Model 805.

**Scope**

This guideline applies to any annuity contract claiming exemption from Model 805 on the basis that it is variable and that it is not unit-linked.

This guidance applies to index-linked crediting features that are provided through non-unitized separate account(s) that are built into policies or contracts (with or without unitized subaccounts) or added to such by rider, endorsement, or amendment. This guidance applies to both insulated and non-insulated separate account products.

This guideline does not apply to products supported by a general account and subject to the requirements of NAIC Model 805, Standard Nonforfeiture Law for Individual Deferred Annuities.

**Definitions**

“Hypothetical Portfolio” means hypothetical portfolio of fixed income assets and derivative assets designed to replicate an Index Option Value at the end of the Index Term.

“Interim value” means the value, attributable to one or more index options, used in determining the death benefit, withdrawal amount, annuitization amount or surrender value at any time other than the start date and end date of an index term.

“Index Strategy” means a method used to determine index credits with specified index or indices and cap, buffer, participation rate, spread, margin or other index crediting elements.

“Index Option Value” means the contract value or other well-defined base value in an index option at an index term start date or end date.

“Index Term” means the period of time from the term start date to the term end date over which an index change and index credit is determined.

**Principles**

This guideline is based on the following principles:

1. The Interim Value methodology must provide equity to both the contract holder and the company. Equity in this case, means that the Interim Values approximate the actual market values of the separate account assets backing the policies or contracts.
2. There exists a hypothetical portfolio containing fixed-income assets and derivatives that use values consistent with the underlying market prices of the hypothetical derivative assets at the time the index crediting elements are determined.
3. Such hypothetical portfolio must be designed to perfectly hedge the benefit guarantees at the end of the term.
4. The market value of such hypothetical portfolio is determinable based on the daily values of the hypothetical portfolio’s assets.

**Text**

Interim values must be based on the market value of the separate account assets supporting the guarantees in the contract. That determination may be based on the actual separate account assets or based on a hypothetical portfolio of supporting assets described herein.

The value of the Hypothetical Portfolio at any time is the sum of the Fixed-Income Asset Proxy value (with or without a market-value adjustment) and the Derivative Asset Proxy value.

“Fixed-Income Asset Proxy” represents a zero-coupon bond that accrues interest, simple or compound, over the Index Term and matures for a value equal to the initial Index Option Value.

“Derivative Asset Proxy” is a package of hypothetical derivative assets designed to hedge the risks associated with guaranteeing the Index Option Value.

The value of the Derivative Asset Proxy plus the value of the Fixed-Income Asset Proxy shall match the Index Option Value at the end of the Index Term as determined by the Index Strategy.

Assumptions used to value the Hypothetical Portfolio including yields, implied volatility, risk-free rate, and dividend yield:

* 1. Must be supported by market prices of the Fixed-Income Asset Proxy and Derivative Asset Proxy at the time index crediting elements are determined;
  2. May be static throughout the Index Term or may be dynamic. If dynamic assumptions are used, the assumptions must be based on market prices of the Fixed-Income Asset Proxy and Derivative Asset Proxy at the time of valuation.

The initial value of the Fixed-Income Asset Proxy is equal to the initial Index Option Value less the initial value of the Derivative Asset Proxy.

Drafting Note: The difference is expected to be small, as any profit provisions, spreads, and expenses should be reflected as explicit charges disclosed in the contract. Any explicit charges deducted at the beginning of the Index Term would decrease the Index Option Value for the purpose of the comparison to the Hypothetical Portfolio value. There may need to be a provision for recognition of periodic charges to be assessed over the Index Term in the comparison required above.

The company (or actuary) must describe the Hypothetical Portfolio and the assumptions used to calculate its value at any time. The product filing must quantify the maximum difference between the value of the Hypothetical Portfolio and the Index Option Value at the beginning of the Index Term. The actuary must justify and explain the source of any material differences.

Company must provide an actuary’s certification that provisions of this guideline are being met. *<What, if any, details need to be provided in the cert or its support?>*

**Effective Date**

Questions to commenters